



Montage- und Betriebsanleitung

D

Installation and operating instructions

GB

Instructions de montage et d'utilisation

F

**ROCKINGER**

*Member of JOST-World*

**Modellreihe – Series – Type**

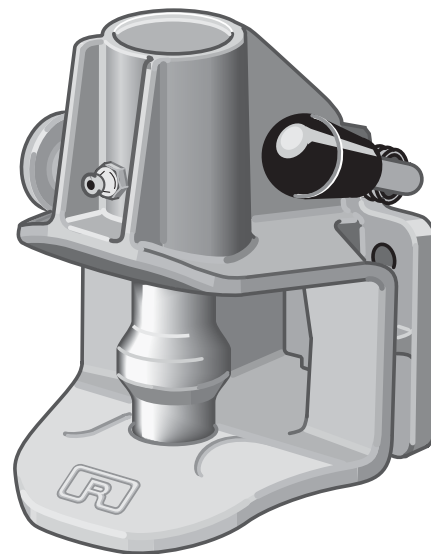
**RO\*243 U 115 E**

**RO\*243 U 130 G**

**Automatische Anhängerkupplung**

**Automatic Trailer Coupling**

**Attelage de remorque entièrement  
automatique**



## Modell RO★243

### Automatic towing hitch type 243 U 115 E

ECE (E1) 55R-01 0031 / 94/20 (e1) 00-0031 class S

Suitable for motor vehicles

- on mounting points which are released by the truck manufacturer (frame cross member)
- on special mounting devices with type approval which are suitable to mount a towing hitch: f.e. ROCKINGER VARIOBLOC

### Automatic towing hitch type 243 U 130G

94/20 (e1) 00-0051, class S

Series RO243 is suitable for:

- Drawbar eyes according to ISO 8755 / DIN 74054 or drawbar eyes which are identical in the dimension.



**The coupling must be installed by authorised personnel!**

**Read these instructions carefully before fitting!**

### Official note

When fitting the trailer coupling the regulations for fitting mechanical fastening systems in accordance with Appendix VII of Directive 94/20/EC appendix 7 ECE R 55 and the national regulations for commercial vehicles must be observed.

**Subject to technical changes without prior notice**

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The safety instructions are summarised in a single chapter. In any situation where the user of the trailer coupling is at risk, the safety instructions are repeated in the individual sections and marked with the warning symbol shown here.

When handling hitches, prime movers and trailers the relevant safety regulations in the respective country must be observed (e.g. Berufsgenossenschaft in Germany). Any safety instructions in the operating manual of the tractor vehicle and the trailer remain valid and must be observed.

For operation, maintenance and assembly the safety instructions listed below must be observed. Further safety instructions are then given in the individual case which relate directly to the respective activity.

## Safety instructions for operation

- The hitch may only be operated by authorised persons.
- The installation and operating instructions of the respective hitch retain their validity and must be observed.
- Only use the hitch and the towing eye of the trailer if they are in perfect technical condition.
- Only carry out hitching / unhitching operations on firm, level ground.
- During hitching, nobody may stand between the tractor vehicle and the trailer.
- After every hitching operation the correct locked status of the trailer coupling must be checked by means of the control pin or the remote indicator. Only drive the rig in the correctly locked status.
- The remote indicator does not exempt the driver from the obligation to check before driving off subject to StVZO (Regulations Authorising the Use of Vehicles for Road Traffic). Before driving off, among other things, the coupling status of the mechanical connection device for the tractor vehicle and the trailer must be checked.

## Safety instructions for maintenance

- For maintenance work, only use the prescribed lubricants.
- Maintenance work may only be carried out by qualified personnel.

## Safety instructions for installation

- Installation may only be carried out by authorised workshops.
- Installation must be carried out in compliance with the relevant accident prevention regulations and the technical regulations for mechanical equipment..
- Only original components may be used.
- Instructions and installation guidelines of the vehicle manufacturer must be observed, e.g. type of fastening, clearances etc.
- All screwed connections must be tightened with the prescribed tightening torque.
- Work may only be carried out on the trailer coupling when it is closed.

### Risk of injuries!

The installation of the hitch on the prime mover must be carried out in accordance with Annex VII of EC Directive 94/20, Annex 7 of ECE R 55 and must be checked accordingly. As applicable, the relevant licensing regulations in the respective country must be observed. This is why the installation must be documented.



**The hitch, the remote control and the remote indicator are connection devices which require model approval and are subject to the highest safety requirements.**

**Alterations of any kind shall cause the warranty to lapse and invalidate the type approval, which in turn invalidates the vehicle operation permit.**

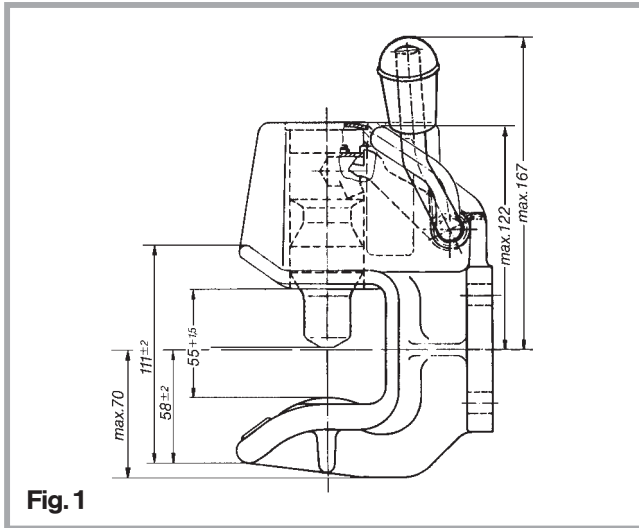


Fig. 1

## 1.1 Before Mounting

### Note:

Please comply with following when fitting hitch:

- Relevant national regulations
- Vehicle manufacturers specifications
- assembly instructions of the vehicle manufacturers

### Note:

The hitch can be coupled with a hinged drawbar trailer or a central-axle trailer. For calculation of the hitching loads, see the D-value calculation in the catalogue or on internet at: [www.jost-world.com/products/rockinger-commercialvehicles/Produkt-Catalogue-online](http://www.jost-world.com/products/rockinger-commercialvehicles/Produkt-Catalogue-online)

## 1.2 Mounting

### Note:

The hitch is ready for operation on delivery. The tow hitch may only be bolted on to an **even surface**, evenness 0.2.

- Fasten the coupling with 4 bolts and self-locking nuts (see table).
- Tightening torque (see table)

### Attention:

- The fastening of the hitch to a hollow profile with inserted fastening bolts **is not permitted** (see fig. 5).

### Tightening torque of bolts at the fastening bearing

| Coupling size | Bolt size | Quality | Bolt designation | Tightening torque <sup>1)</sup> (Nm) |
|---------------|-----------|---------|------------------|--------------------------------------|
| A35           | M 14      | 8.8     | DIN 931          | <b>135</b>                           |
| A, B 11/12    | M 10      | 8.8     | DIN 931          | <b>49</b>                            |

<sup>1)</sup> Tighten bolts with a torque wrench according DIN EN ISO 6789, class A or B

### Note:

Please observe any nut and bolt qualities of the manufacturer deviating from these specifications. The head of the bolt and the surface under the nut must be **even, clean and free of dirt**.

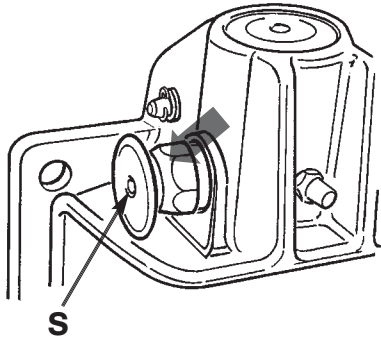


Fig. 2

S

### 2.1 Hitching



When hitching and unhitching, the relevant national regulations must be observed.

**No one must stand between the vehicles!**

- Withdraw check pin (S) (see Fig. 2)
- Push hand lever upwards
- Release brake on front axle of drawbar trailer
- Reverse prime mover

### Hitching a centre-axle trailer

- Slowly reverse prime mover
- Drawbar eye must mate with centre of funnel.  
**If not, funnel, drawbar eye and support unit can be damaged.**

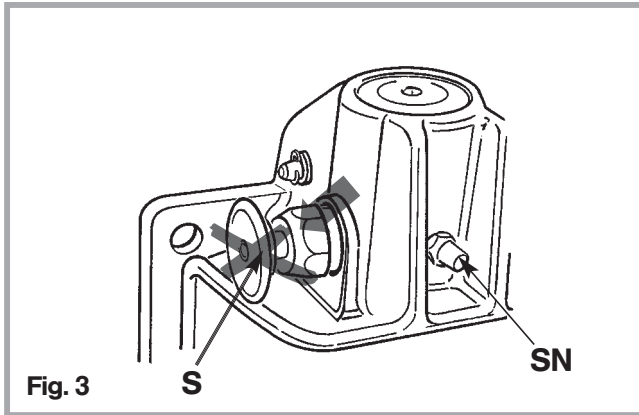


Fig. 3

### Check

After every hitching operation, the correct coupling status in accordance with the regulations **must be checked**.

- The control pin (**S**) must **not protrude out of its guide** after hitching (see Fig. 3).
- If the control pin is projecting, **the unit is not correctly hitched**. Check by feeling when it is dark. **Risk of accident!**



**Driving a trailer in that condition is not allowed.**

### 2.2 Abkuppeln

- Withdraw control pin (**S**) (see Fig. 2)
- Push hand lever upwards
- Separate prime mover and trailer

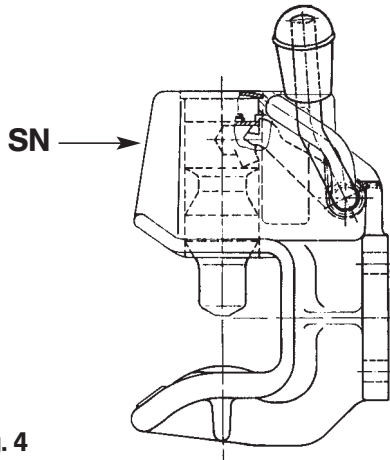


Fig. 4

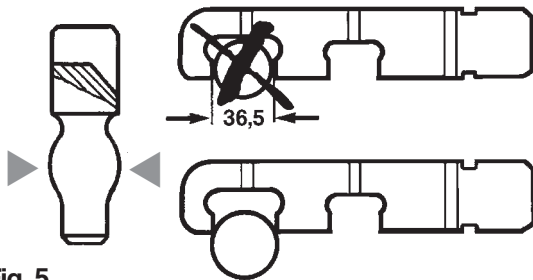


Fig. 5

## 3.1 Care

The normal operational wear and tear of moving parts can be reduced considerably by appropriate care and by regular lubrication of the coupling.

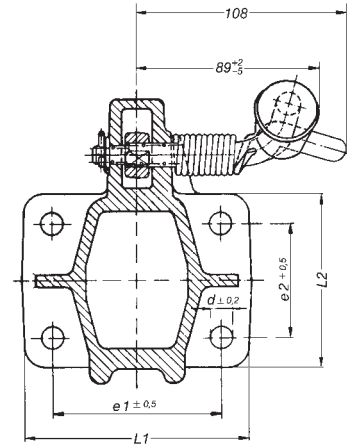
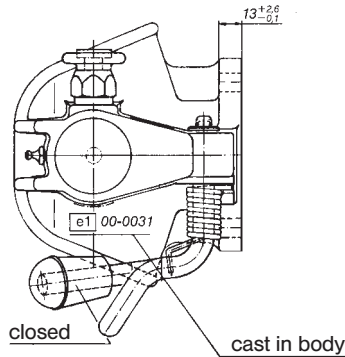
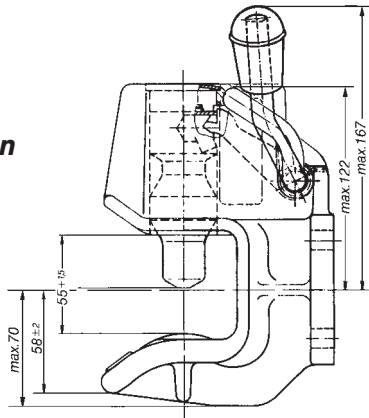
- Open coupling (see Fig. 4) to avoid excessive lubrication of automatic unit
- Lubricate entire coupling via one lubrication nipple (**SN**) f.e. with Renolit MP (ROE 96040)
- Close coupling: raise coupling bin with suitable tool
- Where a centre-axle trailer is used, lubricate underside of drawbar and point of contact with coupling

## 3.2 Prüfung

Check wear on the coupling pin using a ROCKINGER reference gauge (order no. 57026) (see Fig. 5).

The diameter of the crowned part may not be less than **36.5 mm**

Showing:  
Coupling in  
fitted position



| Size | e1<br>(mm) | e2<br>(mm) | d<br>(mm) | L1<br>(mm) | L2<br>(mm) |
|------|------------|------------|-----------|------------|------------|
| 11   | 83         | 56         | 10,5      | 110        | 85         |
| 12   | 85         | 45         | 10,5      | 110        | 85         |
| 35   | 120        | 55         | 15        | 155        | 90         |

Fig. 6



| Article no. RO | Hole pattern (mm) e1 x e2 | Hand lever    | Admissible D-value (kN) | C e n t r e - a x l e t r a i l e r |                                      |                         |     |
|----------------|---------------------------|---------------|-------------------------|-------------------------------------|--------------------------------------|-------------------------|-----|
|                |                           |               |                         | Admissible Dc-value (kN)            | Admissible static vertical load (kg) | Admissible V-value (kN) |     |
| 243A11000      | 83 x 56                   | diag. upwards | 30                      | 18                                  | 250                                  | 12                      |     |
|                |                           |               |                         | or                                  | 30                                   | 250                     | 8,4 |
| 243A12000      | 85 x 45                   | diag. upwards | 18                      | 18                                  | 200                                  | 9,6                     |     |
| 243B11000      | 83 x 56                   | downwards     | 30                      | 18                                  | 250                                  | 12                      |     |
|                |                           |               |                         | or                                  | 30                                   | 250                     | 8,4 |
| 243B12000      | 85 x 45                   | downwards     | 18                      | 18                                  | 200                                  | 9,6                     |     |
| 243A35000      | 120 x 55                  | diag. upwards | 30                      | 30                                  | 350                                  | 12                      |     |

Calculation of D-, Dc- und V-value see catalogue or internet: <http://www.jost-world.com>



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